

AMENDMENTS TO CLAIMS

1. (Currently Amended) A dual band antenna for a wireless communication system, comprising:

a conducting surface for radiating and receiving electromagnetic signals and having a first cutout part having a longitudinal axis and a second cutout part having a longitudinal axis, said first cutout part having a length for producing electromagnetic resonance at a first frequency range, and said second cutout part having a length for producing electromagnetic resonance at a second frequency range, the longitudinal axis of the first cutout part being substantially aligned with the longitudinal axis of the second cutout part;

a feed point connected with said conducting surface around said first cutout part for feeding signals of said first frequency range to said first cutout part and for feeding signals of said second frequency range to said second cutout part; and

a ~~feed line~~ coaxial cable connected with said conducting surface at said feed point for feeding signals to said dual band antenna;

a grounding location formed on said conducting surface around said first cutout part whereby said coaxial cable is grounded; and

a fixation structure disposed on said conducting surface around said grounding location, said fixation structure having a recess receiving said coaxial cable for providing precise fixation and grounding of said coaxial cable.

2. (Original) The dual band antenna of claim 1, wherein said first cutout part and said second cutout part lie in the same plane of said conducting surface.

3. (Canceled)

4. (Original) The dual band antenna of claim 1, wherein said first cutout part and said second cutout part elongate substantially in the same direction on said conducting surface.

5. (Canceled)

6. (Canceled)

7. (Canceled)

8. (Currently Amended) ~~The~~ A dual band antenna of claim 1 for a wireless communication system, comprising:

a conducting surface for radiating and receiving electromagnetic signals and having a first cutout part having a longitudinal axis and a second cutout part having a longitudinal axis, said first cutout part having a length for producing electromagnetic resonance at a first frequency range, and said second cutout part having a length for producing electromagnetic resonance at a second frequency range, the longitudinal axis of the first cutout part being substantially aligned with the longitudinal axis of the second cutout part;

a feed point connected with said conducting surface around said first cutout part for feeding signals of said first frequency range to said first cutout part and for feeding signals of said second frequency range to said second cutout part; and

a feed line connected with said conducting surface at said feed point for feeding signals to said dual band antenna,

wherein said first cutout part is rectangular and said second cutout part is trapezoidal.

9. (Canceled)

10. (Canceled)

11. (Original) An antenna structure for a wireless communication system, comprising:

a conducting plate for radiating and receiving electromagnetic signals and having a first opening and a second opening, said first opening being rectangular for producing

electromagnetic resonance at a first frequency band, and said second opening being trapezoidal for producing electromagnetic resonance at a second frequency band; and
a feed line connected with said conducting plate around said first opening for feeding
~~signals of said first frequency band of said first opening and for feeding signals of said~~
second frequency band of said second opening.

12. (Original) The antenna structure of claim 11, wherein said first opening is on a deflected part of said conducting plate relative to said second opening.

13. (Previously Presented) A dual band antenna for a wireless communication system, comprising:

a conducting surface for radiating and receiving electromagnetic signals and having a first cutout part and a second cutout part, said first cutout part having a length for producing electromagnetic resonance at a first frequency range, and said second cutout part having a length for producing electromagnetic resonance at a second frequency range;

a feed point connected with said conducting surface around said first cutout part for feeding signals of said first frequency range to said first cutout part and for feeding signals of said second frequency range to said second cutout part;

a feed line connected with said conducting surface at said feed point for feeding signals to said dual band antenna;

a grounding location formed on said conducting surface around said first cutout part whereby said feed line is grounded; and

a fixation structure disposed on said conducting surface around said grounding location, said fixation structure having a recess receiving said feed line for providing precise fixation and grounding of said feed line.

14. (Previously Presented) A dual band antenna for a wireless communication system, comprising:

Serial Number 10/054,867

a conducting surface for radiating and receiving electromagnetic signals and having a first cutout part and a second cutout part, said first cutout part having a length for producing electromagnetic resonance at a first frequency range, and said second cutout part having a length for producing electromagnetic resonance at a second frequency range;

a feed point connected with said conducting surface around said first cutout part for feeding signals of said first frequency range to said first cutout part and for feeding signals of said second frequency range to said second cutout part; and

a feed line connected with said conducting surface at said feed point for feeding signals to said dual band antenna,

wherein at least one of said first cutout part and said second cutout part is trapezoidal.

15. (Previously Presented) A dual bend slot antenna for a wireless communication system, comprising:

a conducting plate for radiating and receiving electromagnetic signals and having a first slot and a second slot, said first slot elongating for producing electromagnetic resonance at a first frequency range, and said second slot elongating for producing electromagnetic resonance at a second frequency range; and

a feed line connected with said conducting plate around said first slot for feeding signals of said first frequency range to said first slot and for feeding signals of said second frequency range to said second slot,

wherein two opposing edges of at least one of said first slot and said second slot are not parallel.

16. (New) The dual band antenna of claim 8, wherein said first cutout part and said second cutout part lie in the same plate of said conducting surface.

17. (New) The dual band antenna of claim 8, wherein said first cutout part and said second cutout part elongate substantially in the same direction on said conducting surface.